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ABSTRACT

A term project for a jcurnalism course in documentary phctography (the proposal for which is cited in ED 177 560) centered on photographically documenting a rural community and measuring its symbolic sociodramas. The focus of the project was to determine hcw various ccmmunity groups interpreted a given set of photographs selected tc represent a dcminant social institution, the church, in a small community. A coorientatien mcdel and a multidimensional scaling approach were chosen to analyze the set of documentary photographs and to compare responses of religious and lay groups to the photographs. Results indicated that their responses were multidimensional in interpretatien. The findings suggest that although photographers rarely make any attempt, either qualitatively or quantitatively, to assess the ccmmunication effects of their pictures, documentary photography does extract from its subject the essence of interpersonal relatienships and resulting social order and that the success of any documentary effort should, therefore, be analyzed from the perspectives of those photographed. (AEA)

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DOCUMENTARY PHOTOGRAPHY: COGNITIVE DIMENSIONALITY OF SELECTED PHOTOGRAPHS AND COMMUNITY PERCEPTIONS IN A COORIENTATION MODEL

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DOCUMENTARY PHOTOGRAPHY: COGNITIVE DIMENSIONALITY OF SELECTED PHOTOGRAPHS AND COMMUNITY PERCEPTIONS IN A COORIENTATION MODEL

Documentary Photography: Approach*

During the past three years there has been an effort in our photographic program at establishing and refining an academic and journalistic approach to documentary photography of small communities. Experience obtained during the first two years was distilled this year into a more structured approach both in production and research areas. The design of the course and the research proposal was done jointly. Research objectives impinged upon site selection and photographic approach while choice of town, with resultant photographic constraints, placed particular parameters around the research design.

Town selection was done by the instructor and two teaching assistants who had been participants in the previous year's effort. After lengthy discussion about past successes and constraints plus specific educational objectives of the course, several guidelines were established to aid in the selection process.

The overriding academic consideration was to find a community which would allow students the experience of being involved in the formal as well as the informal aspects of community life.

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*The authors wish to thank F. Gerald Kline and Dan Wackman, University of Minnesota School of Journalism and Mass Communication, for helpful criticism on methodology. The study would not have been possible without countless hours of time given by our students in Journalism 5-377 and 8-604.

This principal consideration led to other criteria which were evaluated by previous experience.

Size of community and distance from campus became two important considerations. The community needed to be small enough (under 300) to allow maximum coverage during the ten-week spring quarter and specifically during the two weeks allotted for on-site photography. To avoid taking the town by photographic blitz, we decided to find a town within an hour's drive from campus which would allow frequent trips. This became a realistic parameter for it presented many communities which were outside the metropolitan influence yet within easy driving distance. A preliminary survey of towns included twenty possible sites. This was narrowed to three communities which were revisited for final consideration.

It was apparent that the self-contained community which was finally selected (Hampton, Minnesota, 295 population, 35 miles from campus) offered the best possible documentary photography laboratory during the current academic year.

Documentary Photography: Production

Photographic production was divided into several stages. While site selection was under way, several academic goals were achieved. A book by Collier (1967), Visual Anthropology: Photography as a Research Tool, was discussed as were twelve major photographic books of historical, social, and photographic importance.

The aim of this literature review was to have the students evaluate and discuss a variety of sources in terms of audience, documentary approach, style, and applicability to the current project. This approach allowed us to prepare and sharpen our perspective toward documentary photography prior to having the students visit the selected community.

After students had made an initial visit to Hampton, classroom discussion centered around a refined photographic approach with specific areas of responsibility. Students were divided into teams. Each team was to look at one aspect of the town's cultural life. The topic areas were broad in scope and allowed individuals to make judgements about particular stories but it also fixed their approach on a general theme so we could insure that the town had been adequately covered. Themes consisted of politics, economics, religion, social life, and education. After assignment of themes students returned to the town for research and interviewing within their areas of responsibility. Proposals were then prepared outlining story ideas and approach. These proposals were reviewed to insure that the topic had been thoroughly researched and that specific photographic ideas were in mind before proceeding. This review process also allowed us to begin script development for the slide show presentation which was the final class project for the quarter.

In addition to photographic goals each student was assigned a task in the production of the slide-tape show and in gathering field data for the research project.

Research Project

During last year's documentary effort, data were collected by survey questionnaires (Brown, 1977). While this data provided an indication of strong, positive public opinion toward the project, no real knowledge of the impact of specific photographs was gained. This research will begin to explore this important area of visual communication.

A community can be thought of as a social unit with certain social and geographic boundaries. Various individuals and subgroups often play multiple roles in interpersonal relationships within the town. Some individuals serve as boundry agents to the town by their connections to the larger world. Small, rural towns, such as the one to be visited, are often characterized by an oligarchic structure (Tichenor, Donohue, & Olien, 1977). Individuals who are socially powerful in one sector of the community tend to be powerful in others. While it might be presumed that leaders and citizens in small town areas would have similar definitions of community problems and agreement on solutions, recent studies described by Tichenor, et.al. (1977) indicate this may not be true.

Community leaders often deal with multiple perspectives, those of the local community and those of the larger society. The more cosmopolitan outlook can often put community leaders at odds with the community on issues involving conflict.

Meisenhelder (1977) in describing the sociological theory of Hugh Duncan argues that:

> Power is the control of the symbolic resources of a community. Societal power is actualized by the control and direction of community dramas. Whoever creates and controls the sociodramas of everyday life controls our lives. For it is in these dramas that acts are named, and it is under these names that we participate in struggle over principles of social order. (p. 270)

Photographically documenting a rural community can be thought of as the measuring of symbolic sociodramas thus producing an objective visual account of the community's patterns of behavior and the symbolic structure by which it lives.

We know that community leaders sometimes differ in orientation to issues with the community due to their multiple connections to a larger society. We know that a community's culture involves standards for perception related to behavior. We know that photography can provide a record of symbolic interaction related to social order. The question at hand is: how will various groups in a community interpret a given set of photographs designed to express an important dimension of life in that community? Will those groups be in agreement in their interpretation? From a theoretical viewpoint, the coorientation strategy seems most applicable to answer these questions.

The coorientation strategy has been well described by Chaffee, McLeod, and Guerrero (1969). However, a brief review of some of the major concepts is appropriate. There are five basic postulates described by McLeod (1971):

> 1. Since communication usually involves an exchange of information between persons, it is desirable to adopt an interpersonal unit of analysis and to reconceptualize

variables into interpersonal constructs. The former implies sampling clusters of people in field studies and using interacting groups in laboratory experiments. Persons interacting bear a particular affective and role relationship to each other.

2. The idea of exchange implies the desirability of studying changes in the cognitive states of persons over time. It should be made clear that such changes do not constitute communication per se, but rather serve as proper index of communication effects where such changes can be systematically related to communication messages or processes. This postulate should not be thought as a simple recommendation for before-after research designs. The requirements of the model probably require measurement over at least four separate points in time.

3. The definition of communication as a process or exchange requires the conceptualization and measurement of sequences of messages and acts independent from the cognitions of the persons interacting.

4. The exchange of information requires that the interacting persons be capable of simultaneous orientation to an object or set of objects that serve as the focus or topic of communication. Prior assessment of such capability becomes a difficult challenge for the researcher.

5. The basic data for coorientation research, then, includes the relationship of the persons interacting, their cognitive states regarding objects of simultaneous orientation over time, and the exchange process that takes place between them. Since the unit is an interpersonal one, it is necessary to analyze combinations of the cognitive states of the interacting persons. These states include their judgments of the cognitive states of other persons. (p. 2)

The general coorientation model is shown in Figure 1. There are five possible measures generated by the model. Congruency is the degree of similarity of a person's own cognitions and his perception of the other person's cognitions. Agreement compares the "own" cognitions of the two individuals. Agreement is used for evaluative cognitions and understanding is used for nonevaluative cognitions (facts or attributes). Accuracy is the extent

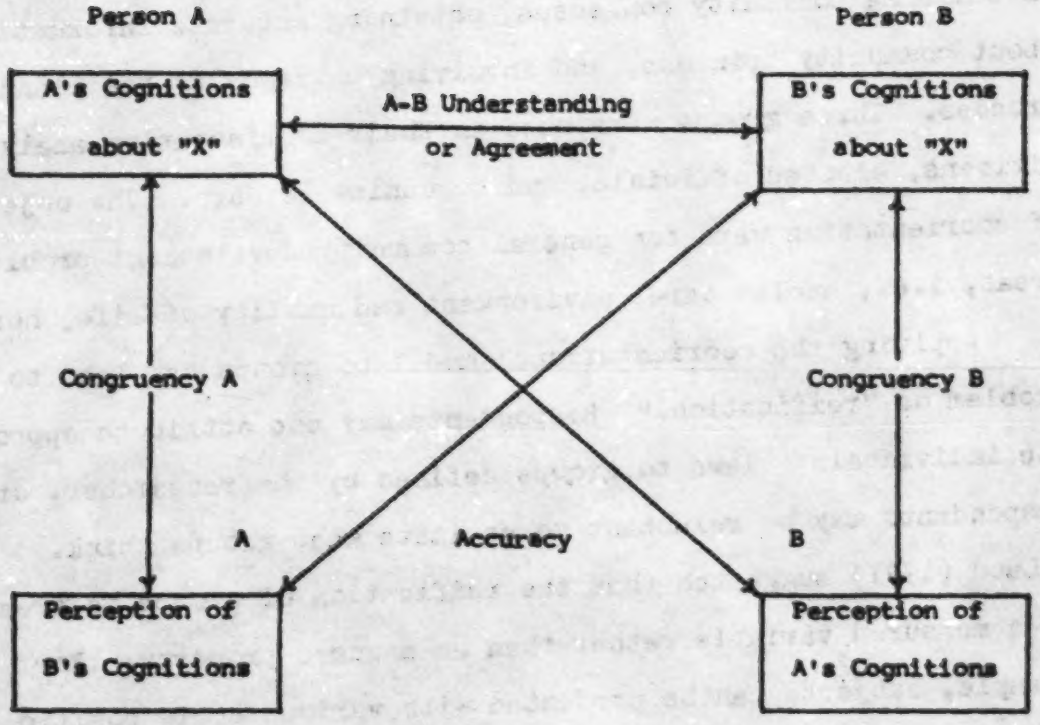
that one person's estimate of the other person's cognitions matches what the other person really does think.

While early studies have focused on interpersonal communication, the model has been extended to the level of intergroup relationships. Meiller and Broom (1979) addressed the problems of building community consensus, obtaining accurate information about community opinions, and involving citizens in the planning process. Three groups were used in their coorientation analysis: citizens, elected officials, and community leaders. The objects of coorientation were ten general community development problem areas, i.e., health care, environment and quality of life, housing.

Applying the coorientational model to groups can lead to a problem of "reification." Respondents may not attribute appropriate individuals' views to groups defined by the researcher, or respondents may be reluctant to estimate what groups think. McLeod (1971) suggested that the reification of groups be treated as a measured variable rather than an assumed property. For example, subjects can be presented with various scale positions relevant to the object of study and be asked to estimate what proportion of people comprising that group would hold each position. However, Meiller and Broom (1979) did not experience either problem in their community studies.

The coorientation measurement model seems to be appropriate for analysis of a selected set of documentary photographs and describing and comparing responses from citizens and other groups

FIGURE 1
Coorientational Measurement Model*



*Chaffee, S. H., Mcleod, J. M., & Guerrero, J. L. Origins and implications of the coorientational approach in communication research. Unpublished manuscript, University of Wisconsin, 1969.

such as elected officials or other community leaders. However, these measures based on correlational analysis can not describe the underlying dimensions of the obtained responses. For example, agreement or understanding could be high but for completely different reasons. What is needed is a description of the underlying cognitive dimensions found in the coorientation object. Fortunately, a methodological approach exists to describe this process.

Multidimensional Scaling (MDS) refers to a class of techniques using proximities among any kind of objects as input (Kruskal & Wish, 1978). A proximity is a number indicating how similar or how different two objects are, or are perceived to be. The chief output is a spacial representation, consisting of a geometric configuration of points like a map. Each point corresponds to one of the objects. This configuration reflects the "hidden structure" in the data. In obtaining proximities data, subjects are asked to directly judge the "psychological distance" of the stimulus objects. Although "similarity" and "dissimilarity" are often used, Kruskal and Wish suggested that alternative words could be: relatedness, dependence, association, complementarity, substitutability, and so on. In order to discover rather than impose the dimensions, the attributes on which the stimuli are to be judged are not specified.

Dimmick (1973) used MDS in obtaining similarities data on ten randomly selected news stories from the AP wire using four groups varying in journalistic experience. Subjects were presented with all possible nonredundant pairs of the ten stories and were

asked to sort the pairs into two piles. One pile contained those stories felt to be "similar," using whatever definition of similarity he chose, and the other pile contained those stories felt to be "different." Subjects then ranked the pairs in each pile from most similar to most different. Thus, a similarity rank order of all pairs of the stories for each subject was obtained. Subsequently, each subject was asked to rate each story on five basic news selection criteria: conflict, proximity, timeliness, known principal, and significance. The ratings on the five selection criteria can be displayed as vectors imposed on the configuration of points generated by the MDS methodology. The proximity of the vectors to the points indicates if those attributes are correlated with underlying cognitive decisional processes used in the sorting of the stimulus objects, in this case news stories.

A similar use of MDS in the design of an advantageous product advertising theme was described by Lautman, Percy, and Kordish (1978).

Gillham and Woelfel (1977) proposed MDS as an important tool in theory of measurement for communication and cognitive processes, particularly in describing the aggregate cognitive processes of a group, organization, or society.

In sum, MDS is seen as an appropriate methodology for describing perceived dimensions in photographs as a prior step in coorientational analysis of community group perceptions.

Procedure

For the purposes of this study, it was decided to provide a set of stimulus photographs which were designed, a priori,

to represent one salient aspect of the community's culture. This will allow greater opportunity to apply the coorientational model. The photographs used will involve a religious theme.

It became apparent from the early site visits that much of the Hampton's activity focused on the church. All but five of the grade school children of the town attend the church school. An early interview produced the statement, "We don't have a town paper but we do have the church bulletin." The local priest stated that the entire town turns out for funerals, thus indicating strong familial ties as well as religious unanimity. The church also serves as the social focus of the community primarily because of access to available meeting space. It seemed then that research focus on perceived religiosity of the community would prove particularly rewarding.

Six photographs of religious situations were combined into all possible nonredundant pairs [N(N-1)/2=15]. These photographs were shown to three groups: religious leaders (N=4), priest and three nuns, random sample of citizens (N=47), and youth (N=11). A similarity rank ordering of the 15 picture pairs was obtained for each subject without imposing verbal labels of picture attributes, in the same fashion as Dimmick (1973). Following the initial sort, subjects were asked to make scaled responses to attribute labels supplied by the researchers for each of the six photographs. These labels were comprised of attributes the experimentors felt would explain dimensionality in the photographs. These attribute labels were: stress, sacrament, love, leadership,

politics, learning, action, religion, teaching, and authority. This data was used in the analyses of cognitive dimensionality.

Subjects were then shown 19 photographs showing diverse locations and activities. Verbal descriptions of these photographs are found in Table 1. This set included the six religious photographs used in the similarity rank ordering task described previously. Subjects were asked first to indicate how well each of the photographs represented an important aspect of life in Hampton to <u>them</u>. Next, the subjects were asked to view the photographs in the eyes of another group and respond to the same question. The townspeople and youth groups estimated how religious leaders would respond; the religious leaders estimated how the townspeople would respond. This data was used in the coorientation analysis.

Responses were collected by personal interview using students from a research seminar class and the documentary class as interviewers. A total of four trips were made to Hampton solely to collect data.

<u>Research Questions</u>

One of the present researchers, studying the relationship between clergy and laity on social issues in the Presbyterian church, found that two factors, religious involvement and secular (political, economic) involvement were in a dynamic relationship. The more secular a parishioner involvement in community life, the less prone they were to accepting the clergy's pronouncements on social issues. The more involved parishioners were in the life and teaching of the church, the more prone they were to accept official church positions on social issues.

Table 1

Verbal Descriptions of Picture Stimuli

Picture	Description
A	Man receiving communion from priest
B	Nun working with boy in school
C	Children receiving communion from priest
D	Boy with hands folded in prayer--looking into camera
E	Priest gesturing with hand
F	Couple being married--kneeling at altar
G	Truck in front of lumber yard
H	Older man, laughing--tight head shot
I	Group of older men
J	Two men walking into Cenex building (agriculture co-op)
K	City council meeting--long shot
L	Sign for Little Oscar's restaurant
M	Man and two children riding mule-drawn wagon
N	Plowed field--aerial shot
O	Woman and baby in beauty parlor
P	Man and two children talking with blacksmith
Q	Two children crossing street by Hennen's store
R	Four children playing foosball
S	Mayor, smiling--medium shot

Studies cited earlier indicate that community leaders, because of their multiple roles will be more cosmopolitan and thus hold opinions which may well be at odds with more traditional community ideas. While neither study examined directly the notion of perceived religiosity, it can be hypothesized that on this single dimension--religiosity--a dynamic relationship between religious involvement and secular involvement can be mapped.

From a coorientational viewpoint we expect:

H1: The greater the involvement of citizens in the activities of the church, the higher the agreement between citizens and religious leaders on their perceptions of selected photographs.

H2: The greater involvement of citizens in the activities of the church, the more congruent will be each group (religious leaders and citizens) in their perception of the other group's perception of selected photographs.

H3: The greater the involvement of citizens in the activities of the church, the greater will be the accuracy of perceptions of selected photographs between citizens and religious leaders.

In relating the MDS analysis to the coorientational model we expect:

H4: The higher the perceived religiousity of citizens of the church, the greater the commonality with religious officials on perceived cognitive dimensions of selected photographs.

Discussion

The two major groups used in this study are the religious leaders of Hampton and a sample of adults from the town. There are approximately 85 households in Hampton and at least one attempt was made to contact each household. Questionnaires were completed from 49 households. Most of the sample of townspeople was selected by a random procedure (40 of 47). If the randomly selected respondant was not available, after repeated contact efforts, the spouse or other adult in the household was asked to complete the questionnaire.

The religious leaders, a priest and three nuns, were selected purposefully since the research design required comparison with this specific group. Additionally, a nonrandom sample of questionnaires were completed by youth of the community (N = 11).

Some demographic characteristics of the townspeople and religious leaders are shown in Table 2. Eligibility for the townspeople group was 21 years and older. Many people have lived in Hampton all of their lives. Virtually all of the people are members of the Catholic church (45 of 47 interviewed) and have been members most of their lives. The education level of the town is relatively low with only six of the sample attending college or graduate school. All of the religious leaders attended college or graduate school.

The similarity ranks of the 15 pictures pairs are shown, by group, in Table 3. The 15 pairs were made from six pictures depicting religious activities. At the time, subjects ranked the picture pairs from most similar to least similar, no other verbal labels were given. Subsequently, subjects were shown the six pictures, one at a time, and asked: "To what extent does this photograph represent _____ to you?" The terms used were: stress, sacrament, love, leadership, politics, learning, action, religion, teaching, and authority. The response range was from 0 to 5, 0 meaning "does not apply" and 5 meaning "very much." A summary measure for each of the 10 items was obtained by adding each item's score across the six pictures.

Matrices formed by the similarity ranks were subjected to MDS analysis using the MINISSA program. The results are shown in Figures 2-4, which are two-dimensional perceptual maps of the photographs. The maps of the three groups are all displayed in two dimensions to facilitate comparison. In figure 2, the smaller the distance between two pictures in the space, the more similar

TABLE 2

COMPARISON OF DEMOGRAPHIC INFORMATION
BETWEEN TOWNSPEOPLE AND RELIGIOUS LEADERS

	Townspeople		Religious Leaders	
Sex:		N		N
	Male	21		T
	Female	26		3
	Total	47	Total	4
Age:	Range 21 to 80 years		43 to 74 years	
	Median 47.5 years		65.5 years	
Years Lived In Hampton:	Range 0 to 76 years		2 to 10 years	
	Median 21 years		7.5 years	
Education:		N		N
	Grades 1 - 8	14		
	Grades 9 - 12	25		
	Trade School	2		
	College	3		2
	Graduate School	3		2
Years in Church:	Range 1-80		___	
	Median 40.5		___	

TABLE 3

AVERAGE SIMILARITY RANKS OF FIFTEEN PICTURE PAIRS
FOR TOWNSPEOPLE, RELIGIOUS LEADERS, AND YOUTH

Picture Pair	Townspeople (N=47)	Religious Leaders (N=4)	Youth (N=11)
AB	9.85	11.00	11.36
AC	4.02	1.25	2.55
AD	7.51	6.25	7.55
AE	7.98	12.75	7.64
AF	5.87	3.00	5.00
BC	9.23	10.75	9.46
BD	8.32	10.25	10.73
BE	9.19	8.25	9.60
BF	10.66	9.50	11.64
CD	7.89	6.75	7.36
CE	7.77	11.75	6.09
CF	6.02	3.25	6.00
DE	8.26	9.00	6.82
DF	8.83	7.25	9.09
EF	8.98	9.00	8.64

Note: The lower the number, the greater the perceived similarity of the pictures in the pair. See Table 1 for a verbal description of the pictures.

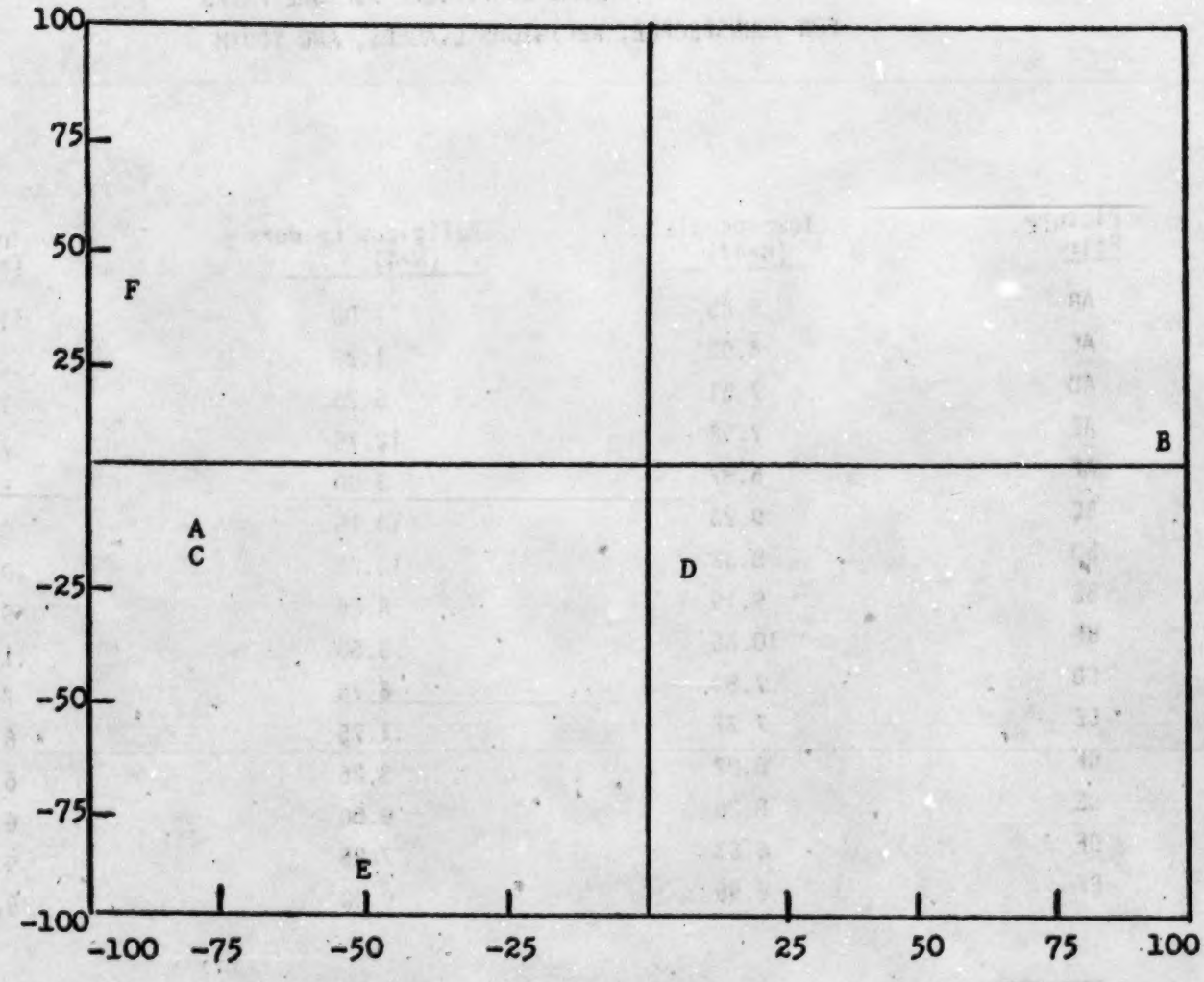


Figure 2 Perceptual Map of Six Religious Pictures: Townspeople

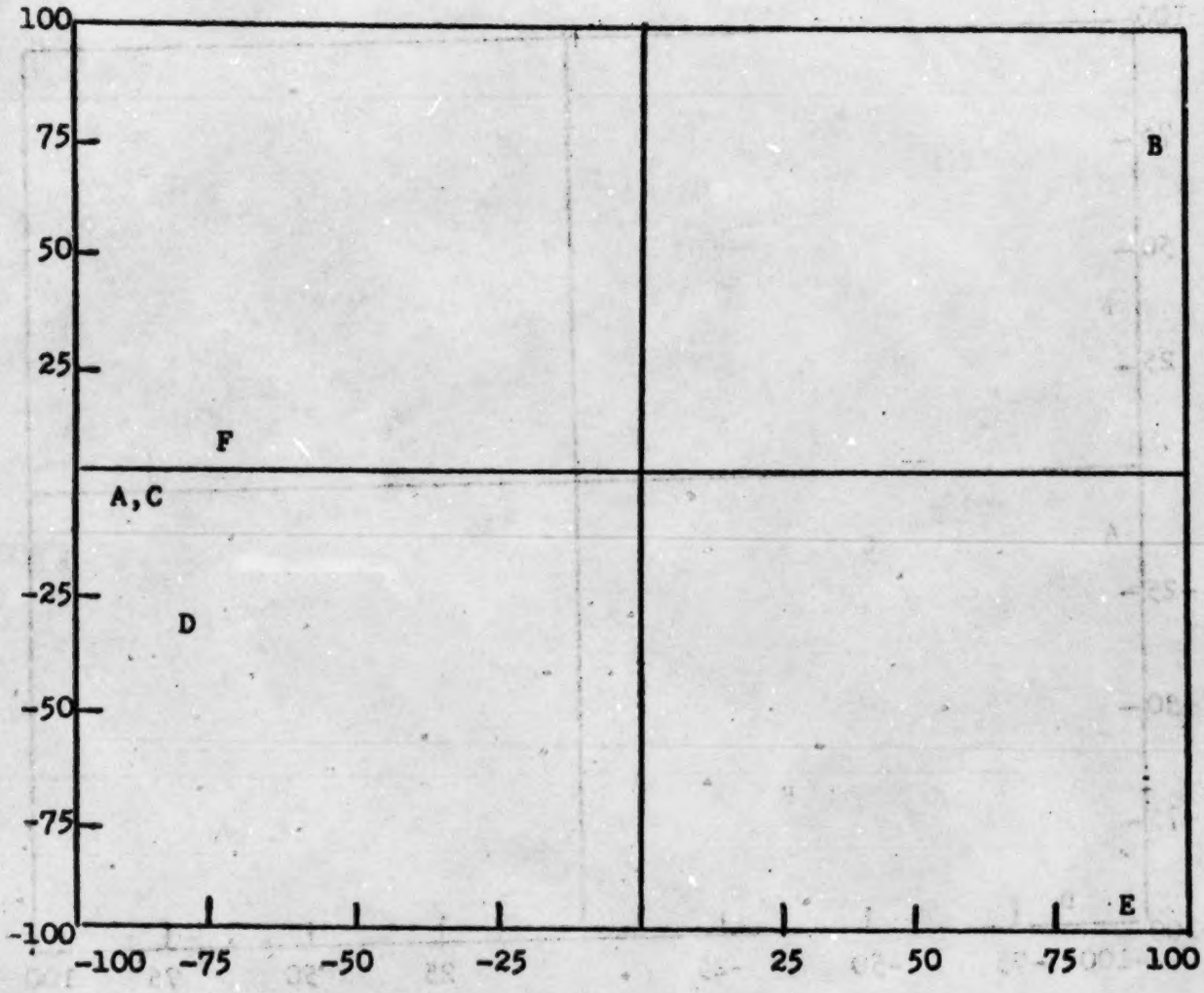


Figure 3 Perceptual Map of Six Religious Pictures: Religious Leaders

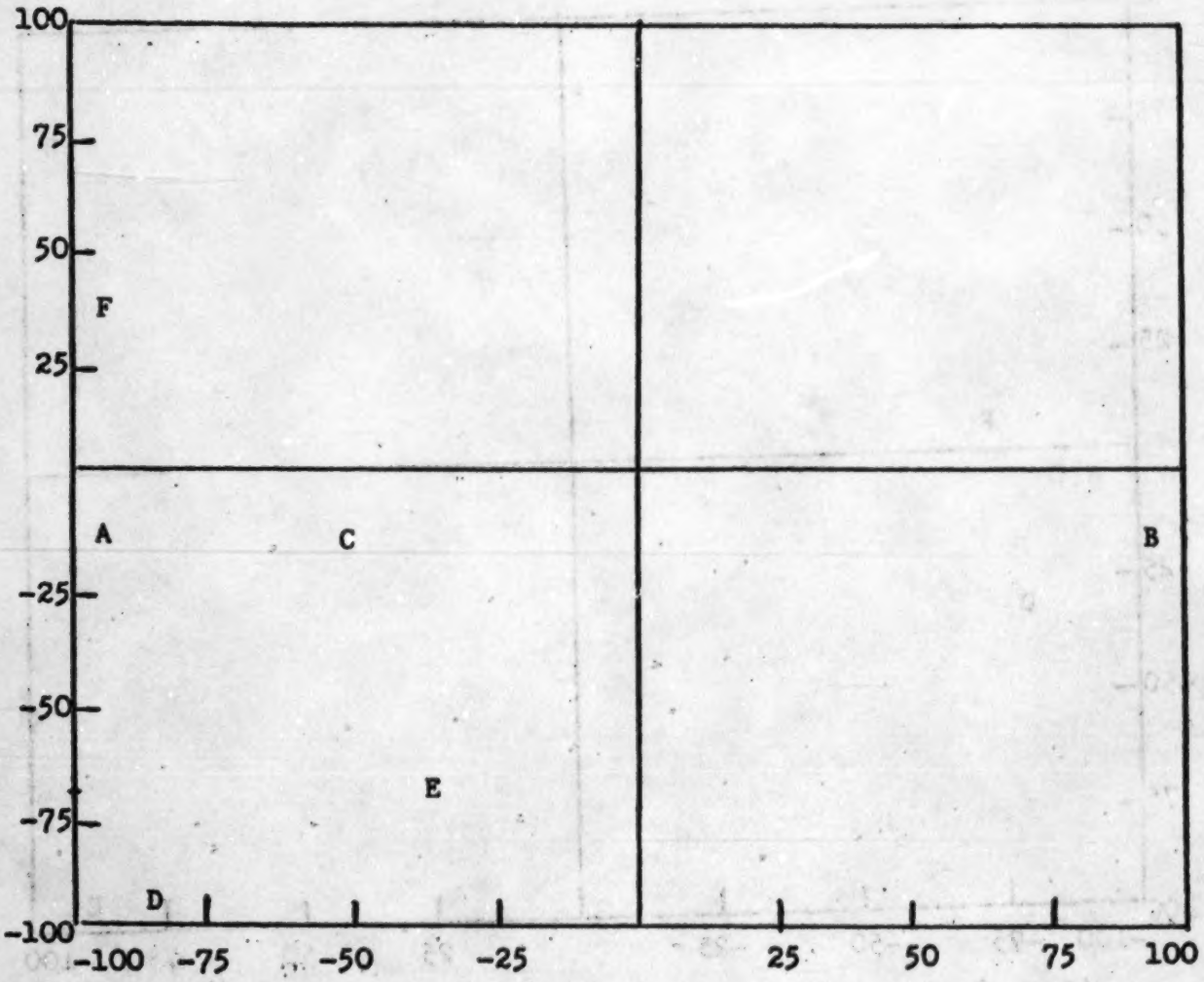


Figure 4 Perceptual Map of Six Religious Pictures: Youth

the pictures were perceived to be. For example, in Figure 2 the subjects saw pictures A and C as virtually identical. Table 3 shows that the picture pair AC ranked first in similarity. Pictures A and C are both of communion (see Table 1 for verbal descriptions of pictures).

The Perceptual maps in Figures 2-4 show some agreement and some disagreement between the townspeople, religious leaders, and youth groups. All three groups perceived pictures A, C, and F as similar. The religious leaders also add D to this cluster. All groups perceive picture B as different from the others. The religious leaders also differentiate E from all others. The religious leaders make the clearest grouping of the photographs. Their cluster of A, C, D, F are all pictures of church services or sacraments. Picture B is a nun teaching in school and picture E is the priest--not in a service or ceremony.

The three groups have differing cognitive maps. They also have differing patterns on responses to our hypothesized dimensional concepts. These patterns are evident in examining Tables 4-6. The concepts teaching, leadership, learning, and authority cluster for the townspeople group. Action, religion, leadership, and love cluster for the religious leaders, with teaching and learning forming a second cluster. The youth group also has two clusters: 1) leadership, authority, love and 2) learning, teaching, and religion.

All groups agree that stress and politics are quite different from the other dimensional concepts. The townspeople view sacrament as similar to learning, leadership, and authority. The religious leaders see sacrament as similar to learning, politics, and teaching. These differences reflect the teaching role of the religious leaders and the learning role of the townspeople.

Table 4

Correlation Matrix for Ten Dimensions of Picture Perception

Townspeople (N=47)

	Stress	Sacrament	Love	Leadership	Politics	Learning	Action	Religion	Teaching	Authority
Stress	----									
Sacrament	.25*	----								
Love	.01	.54***	----							
Leadership	.33*	.54***	.57***	----						
Politics	.30*	.46***	.32*	.34**	----					
Learning	.30*	.62***	.60***	.77***	.37**	----				
Action	.29*	.54***	.42**	.55***	.32*	.64***	----			
Religion	-.05	.52***	.53***	.22	.25*	.46***	.33*	----		
Teaching	.39**	.60**	.36***	.76***	.34**	.85***	.73***	.24	----	
Authority	.19	.43***	.42**	.64***	.36**	.46***	.47***	.35**	.36***	----

Note. * $p < .05$
** $p < .01$
*** $p < .001$

Table 5

Correlation Matrix for Ten Dimensions of Picture Perception

Religious Leaders (N=4)

	Stress	Sacrament	Love	Leadership	Politics	Learning	Action	Religion	Teaching	Authority
Stress	----									
Sacrament	.54	----								
Love	.53	.50	----							
Leadership	.49	.33	.98**	----						
Politics	.19	.92*	.36	.18	----					
Learning	.35	.90*	.07	-.11	.88	----				
Action	.39	-.01	.85	.94*	-.17	-.44	----			
Religion	.62	.35	.97*	.99**	.14	-.09	.93*	----		
Teaching	.10	.79	-.12	-.30	.86	.97	-.62	-.30	----	
Authority	.80	.83	.84	.73	.60	.53	.52	.80	.31	----

Note. * $p < .05$
** $p < .01$
*** $p < .001$

Table 6

Correlation Matrix for Ten Dimensions of Picture Perception

Youth (N=11)

	Stress	Sacrament	Love	Leadership	Politics	Learning	Action	Religion	Teaching	Authority
Stress	----									
Sacrament	.40	----								
Love	.02	.56*	----							
Leadership	-.04	.68*	.29	----						
Politics	.13	.02	-.24	-.23	----					
Learning	-.15	.58*	.51	.44	.23	----				
Action	.02	.17	.20	.07	-.02	.37	----			
Religion	-.04	.25	.39	.29	-.54*	.32	.24	----		
Teaching	-.37	.46	.36	.44	.09	.87***	.39	.50	----	
Authority	-.07	.64*	.47	.88***	-.26	.69	-.18	.35	.50	----

Note. * $p < .05$
** $p < .01$
*** $p < .001$

It is interesting to note the pattern of correlations between religion and stress. Both the townspeople and youth groups have negative correlations, while the religious leaders have a positive correlation. Similarly, the religious leaders positively correlate love and stress. Two patterns that emphasize the difference in communication roles between the religious leaders and other groups are the associations between 1) leadership and politics, and 2) religion and leadership. The leadership-politics correlation is strongly positive for the townspeople group, weakly positive for religious leaders, and negative for the youth group. Apparently, adult citizens see politics in the church administration, the religious leaders do not perceive themselves as political, and the youth group--having little experience in politics of any kind--does not view their religious leaders as being political. Both the townspeople and the youth groups had mildly positive correlations between religion and leadership. In contrast, the religious leaders had a very strong correlation between religion and leadership.

The perceptual maps of the six pictures and the correlations between hypothesized dimensions indicate multidimensionality of interpretation. The pattern and meaning of the interpretations differ among the groups studied. Several of these group differences in dimensionality follow expectations associated with the communication roles of the groups. These correlations can be displayed as vectors on the perceptual maps. This analyses will be done in the future and will further aid the interpretation of underlying cognitive dimensions in the pictures.

We now need to examine coorientation measures for the two major groups, townspeople and religious leaders and test the hypotheses stated earlier.

A larger number of photographs was used (29) which included the six religious pictures.

Measures of agreement, congruency, and accuracy are needed to test the hypotheses. Responses to the individual pictures measure the extent that subjects believed a particular picture represented an important aspect of life in Hampton. Agreement was computed as follows:

$$\text{Agreement Score} = \sum_{i=1}^{19}(A_i - B_i)^2$$

Where: A is one's own response toward a picture and; B is the mean response of the other group toward that picture.

Congruency was computed by:

$$\text{Congruency Score} = \sum_{i=1}^{19}(A_i - O_i)^2$$

Where: A is one's own response toward a picture and; O is one's perception of the other group's mean response toward that picture.

Similarly, accuracy was computed by:

$$\text{Accuracy Score} = \sum_{i=1}^{19}(O_i - B_i)^2$$

Where: O is one's perception of the other group's mean response
B is the mean of the other group's response toward that picture

The lower the score the higher the degree of agreement, congruency and accuracy since a low score indicates a minimal difference with referents described in the equations. The measures are significantly correlated except for the agreement and accuracy measures.

All three measures were found to be significantly associated with variables indicating involvement of the townspeople in activities of the church. Agreement was significantly related to church study group participation ($p < .05$). Congruency was significantly related to having had children attend the Catholic

school, Saint Mathias ($p < .05$). Accuracy was significantly related to the length of time one has been a member of the church ($p < .05$). Thus H_1 - H_3 are supported. It is surprising that the correlated coorientation measures were not related to the same variables. However, it is likely that each of the variables associated with the coorientation measures is tapping a broader construct of church participation. What we are seeing are various outerwrappings of that broader concept.

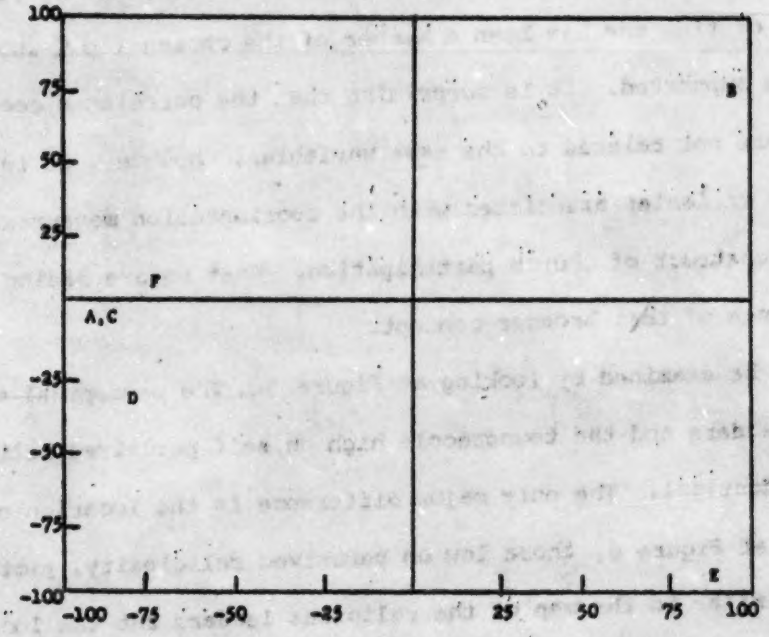
H_5 can be examined by looking at Figures 5-6. The perceptual maps of the religious leaders and the townspeople high on self-perceived religiosity are virtually identical. The only major difference is the location of picture D. In looking at Figure 6, those low on perceived religiosity, pictures A, C, and F are similar to the map of the religious leaders but the locations of pictures B, D, and E are quite different. Thus, H_5 is supported.

One additional finding is reported in Table 7. One's general attitude toward being photographed was significantly associated with actually being photographed in the Hampton documentary.

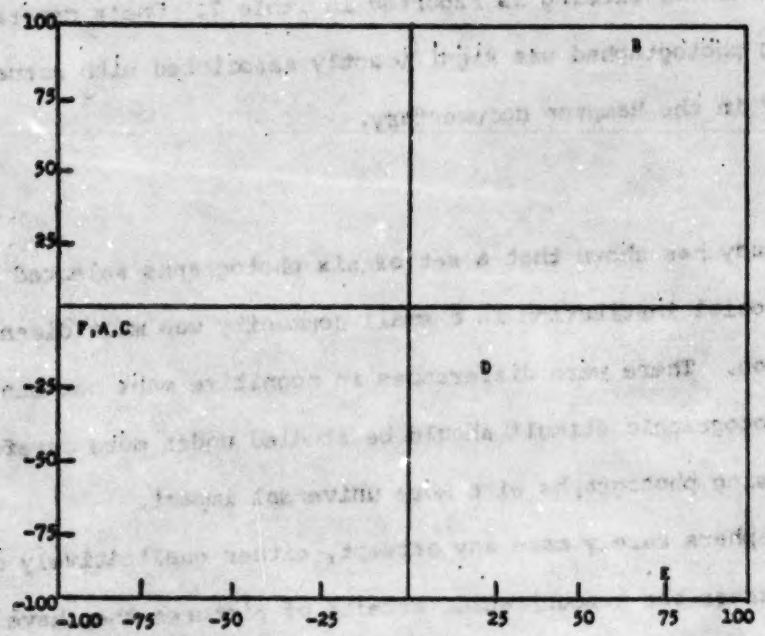
Conclusion

This study has shown that a set of six photographs selected to represent a dominant social institution in a small community was multidimensional in interpretation. There were differences in cognitive maps between the groups studied. Photographic stimuli should be studied under more carefully controlled conditions using photographs with more universal impact.

Photographers rarely make any attempt, either qualitatively or quantitatively, to assess the communication effects of pictures they have made. Documentary photography is extracting from its subject the essence of interpersonal relationships and resulting social order. The success of any documentary effort should, in part, be analyzed from the perspectives of those photographed. This study provides a methodological base for such an analysis.

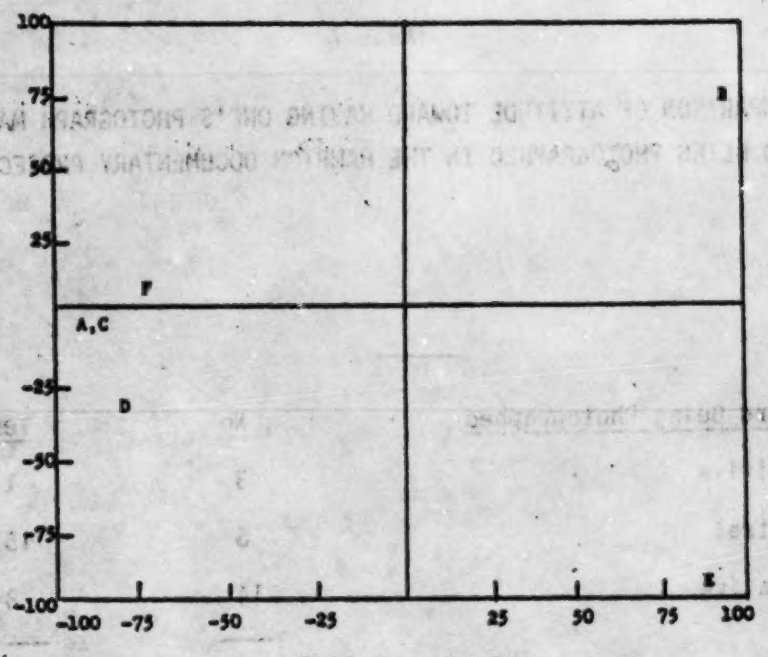


Religious Leaders

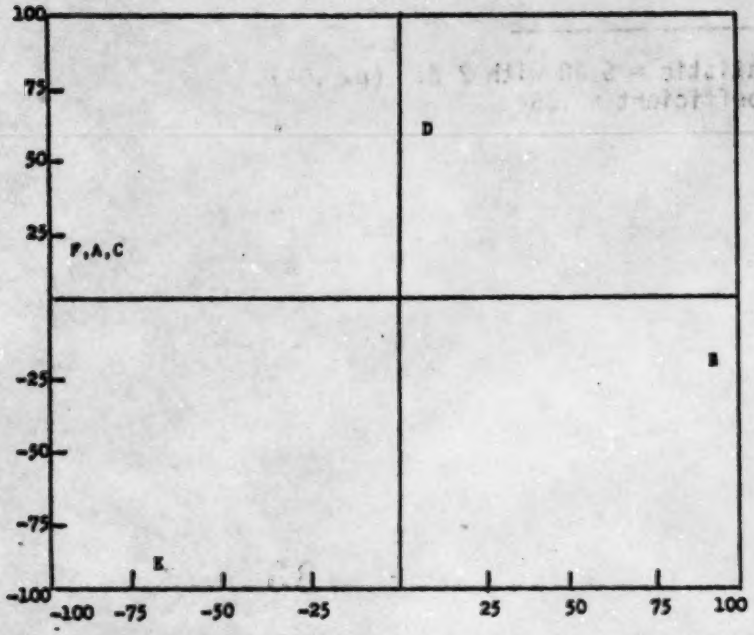


Townspeople High on Perceived Religiosity

Figure 5 **Perceptual Maps of Six Religious Pictures: Religious Leaders and Townspeople High on Perceived Religiosity**



Religious Leaders



Townspeople Low in Perceived Religiosity

Figure 6 Perceptual Maps of Six Religious Pictures: Religious Leaders and Townspeople Low in Perceived Religiosity

TABLE 7

COMPARISON OF ATTITUDE TOWARD HAVING ONE'S PHOTOGRAPH MADE AND BEING PHOTOGRAPHED IN THE HAMPTON DOCUMENTARY PROJECT

Attitude Toward Being Photographed	No	Yes	Total
Positive	3	1	4
Neutral	6	15	21
Negative	14	8	22
TOTAL	23	24	47

Chi Square Statistic = 6.48 with 2 df ($p < .04$)
Contingency Coefficient = .35

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